

LAND APPLICATION SITE

HAROLD T. EPPARD

GRHTE 1-2

GREENE COUNTY

**VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS**

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 9-22-14 between Harold Eppard referred to here as "Landowner", and Recyc Systems, Inc; referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:

The Landowner is the owner of record of the real property located in Greene Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges			
<u>Tax Parcel ID</u>	<u>Tax Parcel ID</u>	<u>Tax Parcel ID</u>	<u>Tax Parcel ID</u>
<u>36-6-1A</u>			

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one: ☒ The Landowner is the sole owner of the properties identified herein.
☐ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

<u>Class B biosolids</u>	<u>Water treatment residuals</u>	<u>Food processing waste</u>	<u>Other industrial sludges</u>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

1066 Parker Mtn. Rd
Standardsville, VA 22973

X Harold T Eppard
Landowner - Printed Name, Title

Harold T Eppard
Signature

1066 Parker Mtn. Rd
Standardsville, VA 22973
434-985 2365
Mailing Address & Phone Number

Permittee:

Recyc Systems, Inc, the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☐ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

Stanko
Permittee - Authorized Representative
Printed Name

Stanko
Signature

PO Box 562 Remington, Virginia 22734
Mailing Address

Permittee: Recyc Systems, Inc County or City: Greene
 Landowner: Harold Eppard

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
2. Public Access
 - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
 - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
 - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
 - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
 - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
 - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
 - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
 - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:

 - a. Meat producing livestock shall not be grazed for 30 days,
 - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
 - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

X Harold Eppard
 Landowner's Signature

9-22-14
 Date

1066 Parker Mtn. Road
Stanardsville, VA 22973
434-985-2365

Harold Eppard
 Farm Operator Signature

Mailing Address & Phone Number

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Recyc Systems, Inc

County or City: Greene

Landowner: Harold T. Eppard

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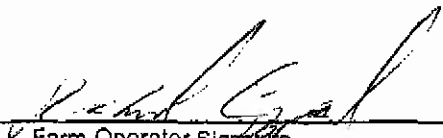
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Landowner's Signature

Date


Farm Operator Signature

Richard Eppard

1041 Parker Mtn. Road
Stanardsville, VA 22973
434-996-5972

Mailing Address & Phone Number

FARM DATA SHEET

SITE NAME:	Harold T. Eppard	COUNTY:	Greene
OWNER:	Harold T. Eppard	OPERATOR:	Richard Eppard
OWNER'S ADDRESS:	1066 Parker Mtn. Road Stanardsville, VA 22973	OPERATOR'S ADDRESS:	1041 Parker Mtn. Road Stanardsville, VA 22973
OWNER'S TELEPHONE:	434-985-2365	OPERATOR'S TELEPHONE:	434-990-0299
GENERAL FARM TYPE:	Hay/ Pasture	CELL PHONE:	434-996-5972
# CATTLE:	20	EMAIL:	
LAGOON or SLURRY:	None	LATITUDE:	38.281
TOPO QUAD:	Stanardsville	LONGITUDE:	78.478
COMMENTS:	METHOD OF DETERMINATION: Online Maps		

BB

11-7-17

RECYC SYSTEMS, INC

FIELD DATA SHEET

Field Identification	DEQ Control ID	Gross Acres	Environmentally Sensitive Soils				Hydro Map	Tax Map #	FSA Tract #
			Water Table	Bed Rock/Shallow	Surf/ Leach	Freq Flood			
GRHTE 1	51079-00078-0000	15.0	-	-	-	-	JR 10	36-6-1A	T 3117 F 0, 3
GRHTE 2	51079-00079-0000	8.7	-	-	-	Cs Feb.-May Cv Nov.-May	JR 10	36-6-1A	T 3117 F 0, 1
TOTAL ACRES IN SITE		23.7							

11-7-17

[illegible]

Report Number: 17-254-0553

Account Number: 70594



7621 Whitepine Road, Richmond, VA 23237

Main 804-743-9401 • Fax 804-271-6446

www.waypointanalytical.com

Send To: Recyc Systems Inc
Susan Trumbo
8455 Whiteshop Road
Culpepper VA 22701

"Every acre.. Every year"™

Grower: Harold Eppard
Greene Co

SOIL ANALYSIS REPORT

Analytical Method(s): SMP Buffer pH Mehlich 3 Loss On Ignition Water pH

Date Received: 09/11/2017

Date Of Analysis: 09/12/2017

Date Of Report: 09/12/2017

Sample ID Field ID	Lab Number	OM	W/V	ENR	Phosphorus			Potassium	Magnesium	Calcium	Sodium	pH		Acidity	C.E.C
		% Rate	Soil Class	lbs/A	M3 ppm Rate	ppm Rate	ppm Rate	K ppm Rate	Mg ppm Rate	Ca ppm Rate	Na ppm Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
1	23698	6.3 H		150	69 H			79 L	141 M	1431 H		6.1	6.79	1.4	9.9
2	23699	6.7 H		150	11 VL			200 VH	185 H	740 L		5.6	6.76	1.7	7.5

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts		
	K %	Mg %	Ca %	Na %	H %	NO ₃ N ppm Rate	S ppm Rate	Zn ppm Rate	Mn ppm Rate	Fe ppm Rate	Cu ppm Rate	B ppm Rate	SS ms/cm Rate		
1	2.0	11.9	72.3		14.1			6.2 H	23 H						
2	6.8	20.6	49.3		22.7			2.8 M	27 H						

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams) Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by Waypoint Analytical Virginia, Inc

by: *Paunc McGroary*

Paunc McGroary

Report Number: 17-254-0553

Account Number: 70594

*"Every acre. Every year."*

7621 Whitepine Road, Richmond, VA 23237

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Send To: Recyc Systems Inc
 Susan Trumbo
 8455 Whiteshop Road
 Culpepper VA 22701

Grower: Harold Eppard
 Greene Co

Date Received: 09/11/2017

Date Of Report: 09/12/2017

SOIL FERTILITY RECOMMENDATIONS

Sample ID Field ID	Intended Crop	Yield Goal	Lime Tons/A	Nitrogen N lb/A	Phosphate P ₂ O ₅ lb/A	Potash K ₂ O lb/A	Magnesium Mg lb/A	Sulfur S lb/A	Zinc Zn lb/A	Manganese Mn lb/A	Iron Fe lb/A	Copper Cu lb/A	Boron B lb/A
1	Adjust pH to 6.8	0	1.5				0			0			
2	Adjust pH to 6.8	0	2.0				0			0			

Comments:

"The recommendations are based on research data and experience, but NO GUARANTEE or WARRANTY expressed or implied, concerning crop performance is made."

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Pauric McGroary

THE PLANNER IS NOT STATE CERTIFIED

Nutrient Management Plan Balance Sheet
(Fall, 2017-Winter, 2019)
Harold T. Eppard
Planner: John Doe

Tract: 3117 Location: Greene

N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed

Field CFSA No /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (lbs/ac)	Leg /Man Resid	Manure/Biosid Rate & Type (season)	IT (d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes	
0, 3/GRHTE 1(N)	15/15	2017	Hay/Pasture	120-50-170	0/0				120-50-170	N/A			
0, 1/GRHTE 2(N)	9/9	2017	Grass Pasture	50-120-0	0/0				50-120-0	N/A			

Commercial Application Methods:

br - Broadcast ba - Banded sd - Sidedress

Notes:

Soil Test Summary

Tract	Field	Acre	Date	P2O5	K2O	Lab	Soil pH	Lime Date	rec. lime tons/Ac
3117	GRHTE 1	15	2017-Fa	H (69 P ppm)	M (79 K ppm)	A&L MIII	6.1		
3117	GRHTE 2	9	2017-Fa	L- (11 P ppm)	H+ (200 K ppm)	A&L MIII	5.6		

Field Productivities for Major Crops

Tract Name	Tract/ Field	Field Name	Acres	Predominant Soil Series	Corn	Small Grain	Alfalfa	Grass Hay	Environmental Warnings
3117	3117/0, 3	GRHTE 1	15	Braddock	IIIa	I	II	II	
	3117/0, 1	GRHTE 2*	9	Braddock	IIIa	II	II	III	High Leaching, High Slope

* Do not apply manure or biosolids more than 30 days prior to planting. Apply commercial fertilizer nitrogen to row crops in split spring applications.

Yield Range

Field Productivity Group	Corn Grain Bu/Acre	Barley/Intensive Wheat Bu/Acre	Std. Wheat Bu/Acre	Alfalfa Tons/Acre	Grass/Hay Tons/Acre
I	>170	>80	>64	>6	>4.0
II	150-170	70-80	56-64	4-6	3.5-4.0
III	130-150	60-70	48-56	<4	3.0-3.5
IV	100-130	50-60	40-48	NA	<3.0
V	<100	<50	<40	NA	NA

Farm Summary Report

Plan: New Plan Fall, 2017 - Winter, 2019

Farm Name: Harold T. Eppard

Location: Greene

Specialist: John Doe

N-based Acres: 23.7

P-based Acres: 0.0

Tract Name: 3117

FSA Number: 3117

Location: Greene

Field Name: GRHTE 1

Total Acres: 15.00 Usable Acres: 15.00

FSA Number: 0, 3

Tract: 3117

Location: Greene

Slope Class: C Hydrologic Group: C

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Fa-2017	6.1	H(69 P ppm)	M(79 K ppm)	A&L MIII	

Soils:

PERCENT	SYMBOL	SOIL SERIES
---------	--------	-------------

55	BcC	Braddock
2	BdD3	Braddock
14	EIC	Elioak
29	MvB	Meadowville

Field Warnings:

Field Name: GRHTE 2

Total Acres: 8.70 Usable Acres: 8.70

FSA Number: 0, 1

Tract: 3117

Location: Greene

Slope Class: C Hydrologic Group: D

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Fa-2017	5.6	L-(11 P ppm)	H+(200 K ppm)	A&L MIII	

Soils:

PERCENT	SYMBOL	SOIL SERIES
24	BcC	Braddock
42	BdD3	Braddock
21	Cs	Comus
10	Cv	Craigsville
4	MvB	Meadowville

Field Warnings:

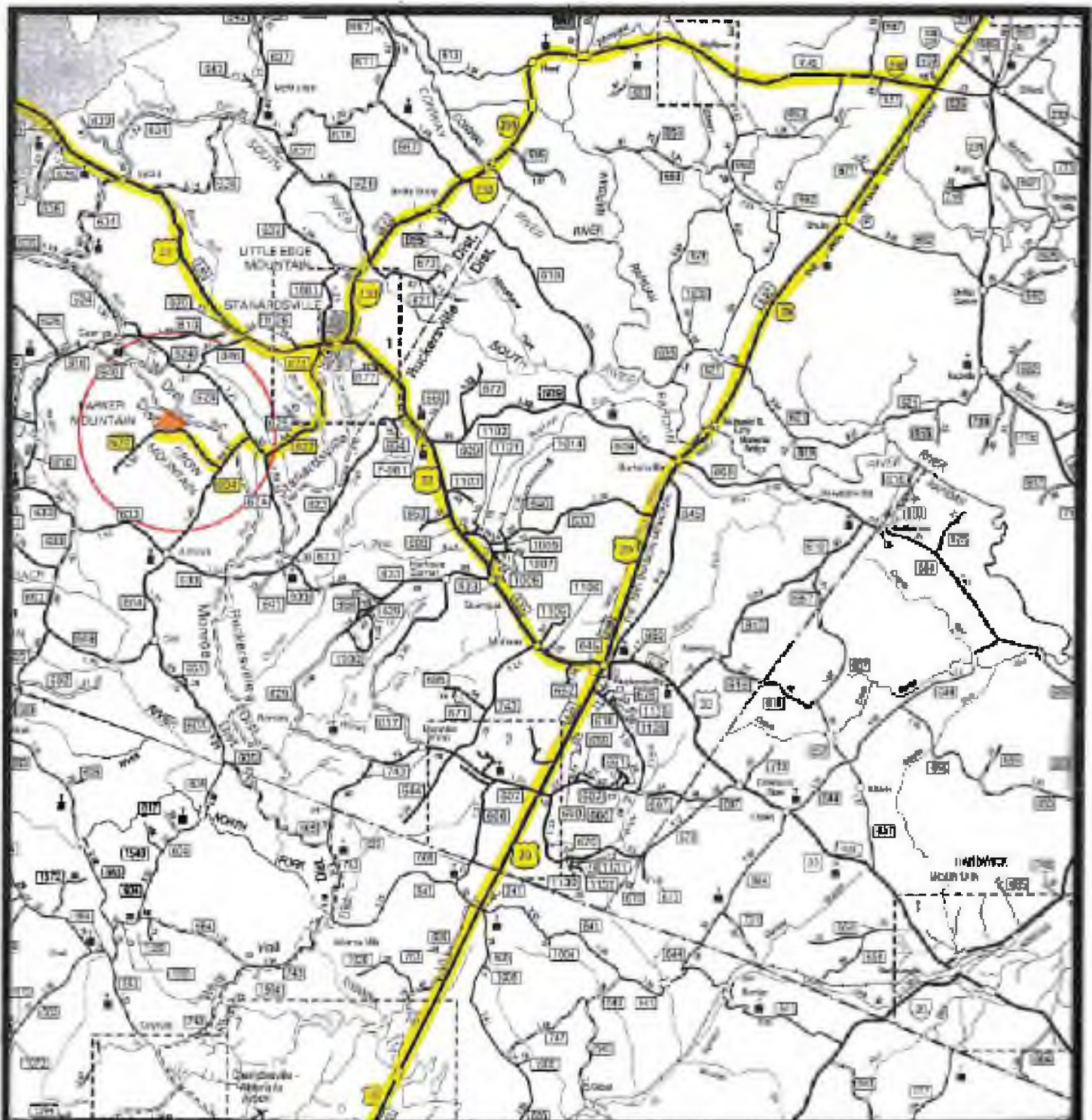
Environmentally Sensitive Soils due to:

Soils with potential for leaching based on soil texture or excessive drainage

Soils with percent slope in excess of 15%

M P

Recyc SystemsTM Inc. (Biosolids Land Application)



Scale: 1" = 2 miles

GRHTE 1-2

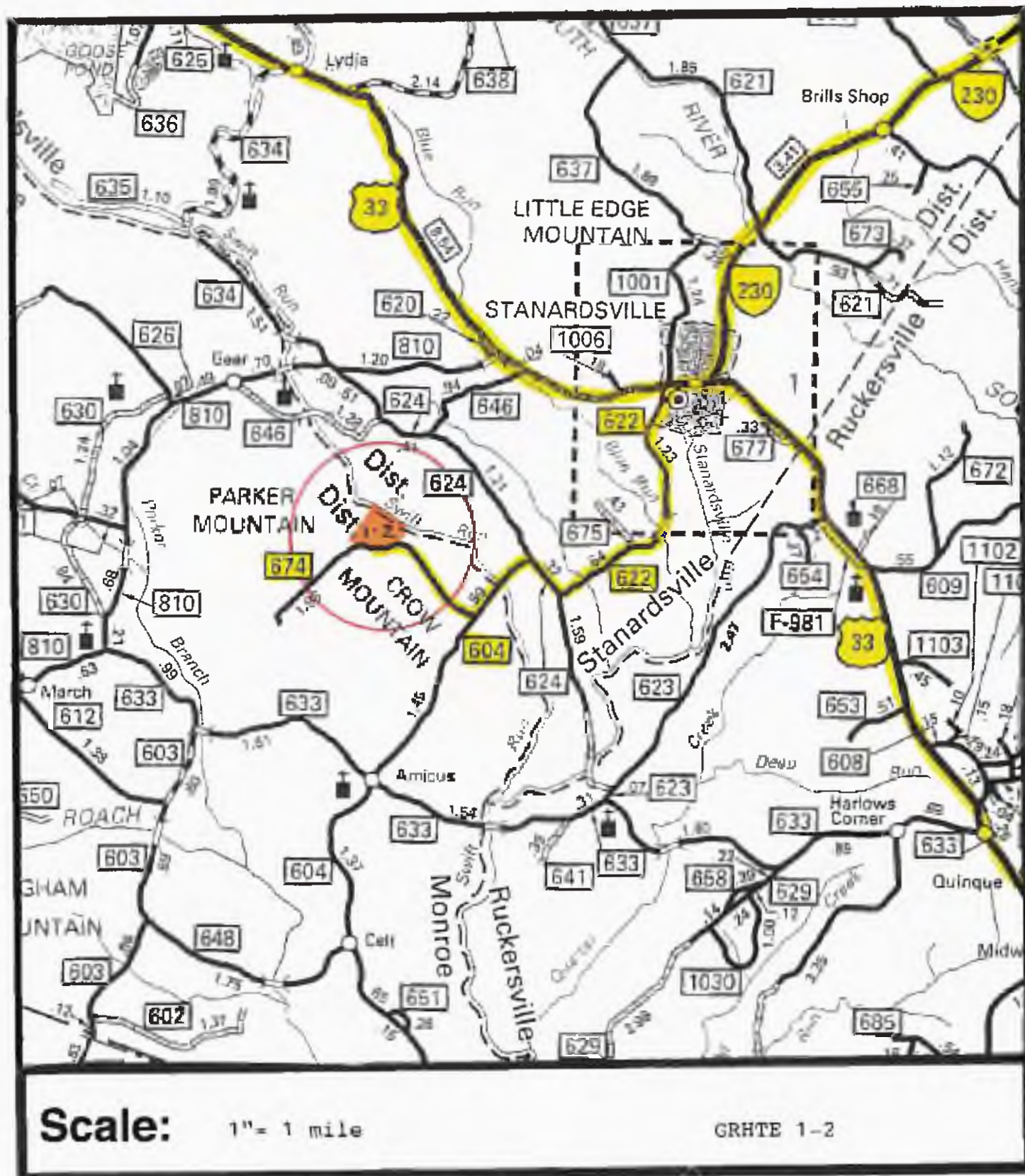
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VICINITY MAP



Recyc Systems™

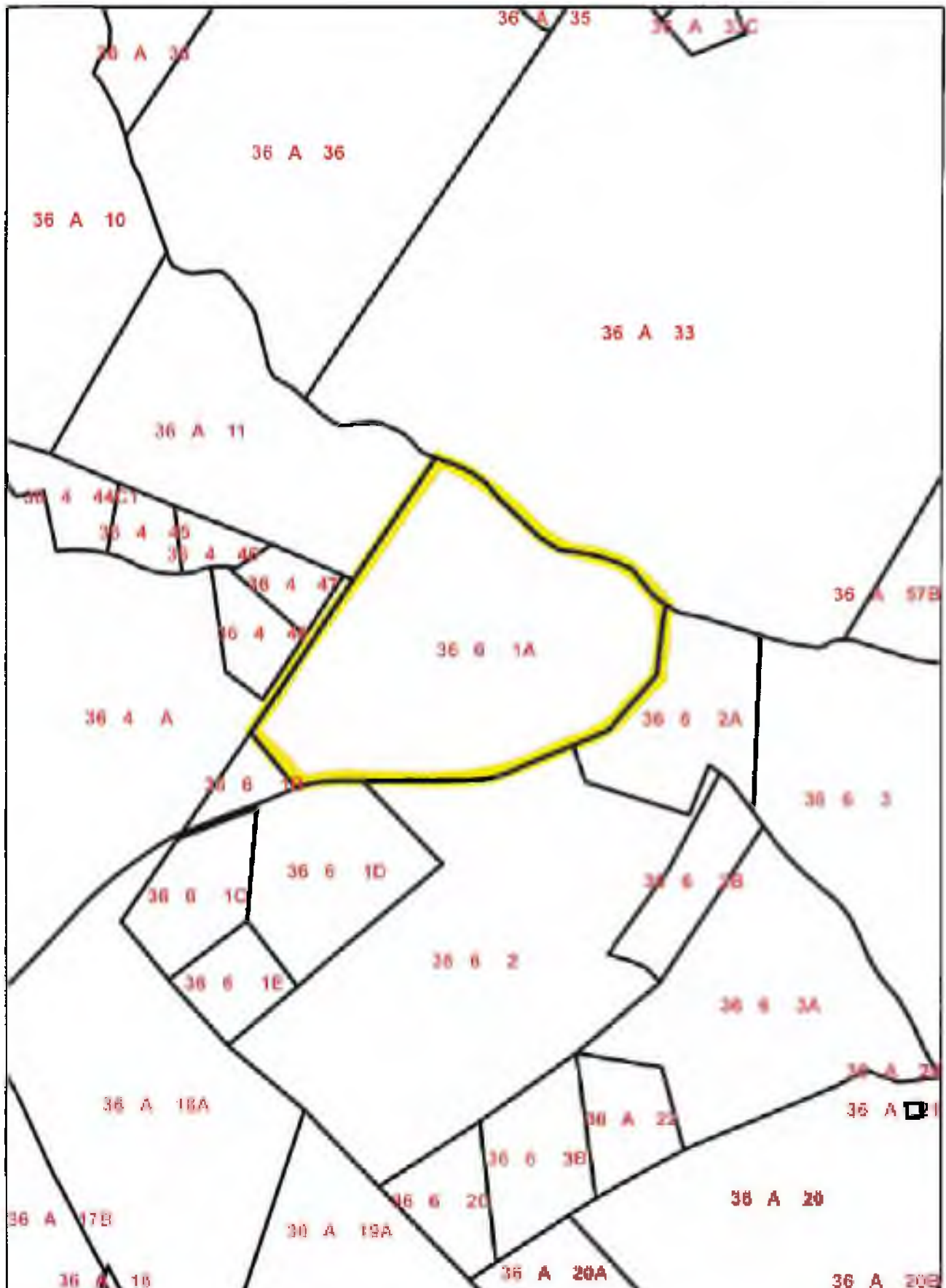
Inc. (Biosolids Land Application)



11-7-17

VICINITY MAP





11-7-17

Tax Map

1 in = 660 feet

ADJOINING LANDOWNERS

Harold Eppard

GREENE COUNTY

Tax Map	Parcel #	Owner Name(s)
36	4-A	Farmcolony Homeowners Association Inc.
	4-48	Raymond V. & Margaret R. Rush
	6-1B	Thomas L. Eppard
	6-1D	Richard and Teresa Eppard
	6-2	John Charles Ewing and Ruanne Alice Reimer
	6-2A	John C. & Ruthann A. Ewning
	A-11	Percy Powell (Heirs) c/o Alvin Anderson
	A-33	Hugh B. & Willie J. Collier

Recyc SystemsTM Inc.

(Biosolids Land Application)



Sources
on Service

Web Soil Survey
National Cooperative Soil Survey

Scale: 1"= 660 ft.

GRHTE 1-2

11-7-17

SOIL MAP

Frequent Flooding
marked in Orange





FSN 549 Tract 3117
Harold Eppers

Scale: 1" = 660 ft.



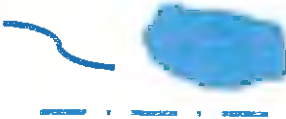











GRHTE 1-2

11-7-17

AERIAL MAP



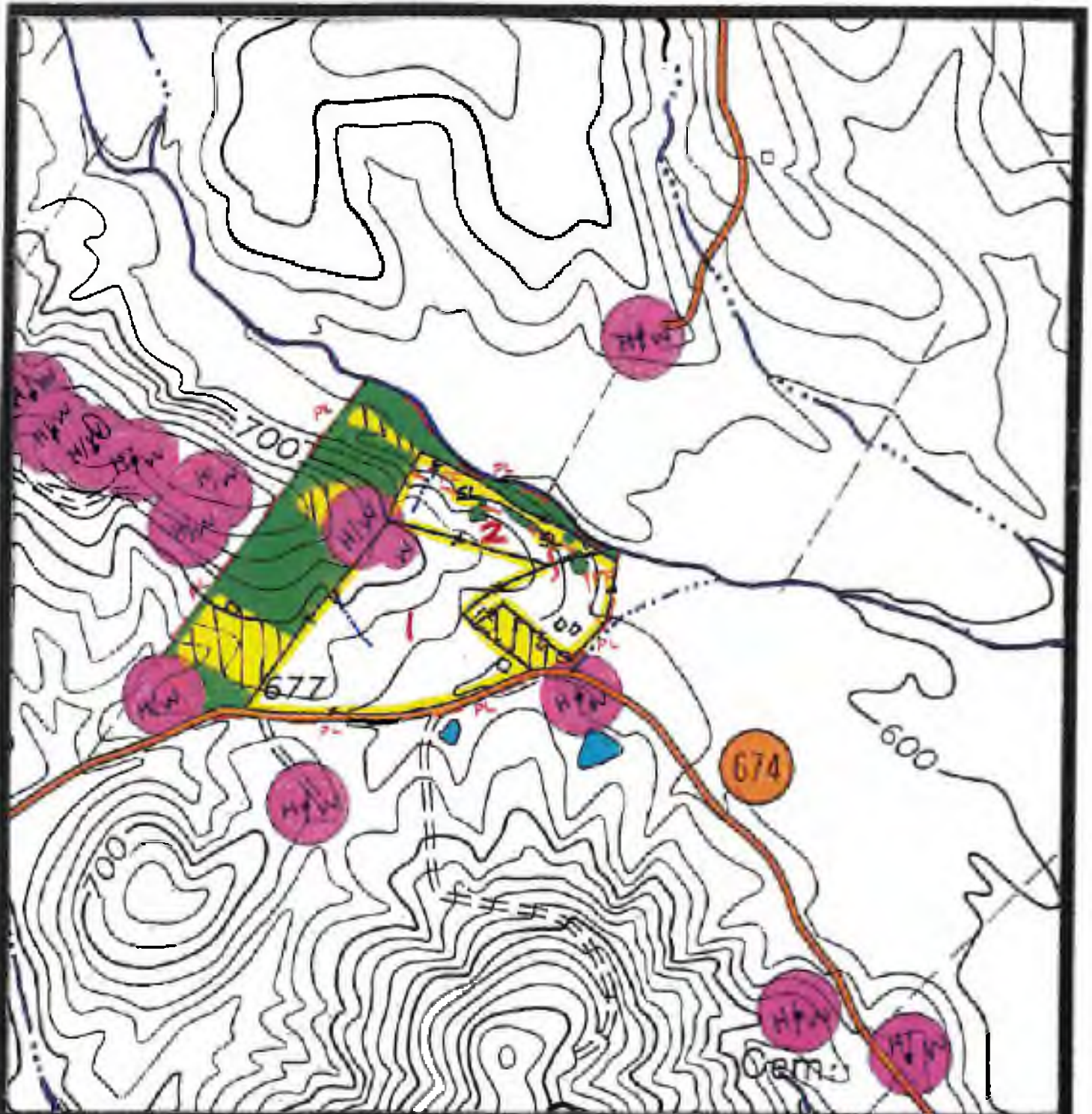
Legend For Site Plan

Symbol	Feature	Minimum Setback
	House and Well	200 feet from occupied dwelling * 100 feet from water supply wells or springs
	Well or Spring	100 feet from water supply wells or springs
	Streams or Surface Water	35 feet with 35 foot vegetated buffer 100 feet without vegetated buffer
	Wet Spot	
	Trees and Woods	
	Private Drive	
	Rock Area/Rock Outcrop	25 feet from rock outcrops 50 feet from limestone rock outcrops
	Severely Eroded Spot	18 Inch minimum depth of soil
	Sink Hole	100 feet from open sinkholes 50 feet from closed sinkholes
	State Road	10 feet from side of roadway
	Fence / Field Boundary	
	Property Line	100 feet from property line *
	Slope	15% maximum
	Hashed out Area	No application

*Buffer can be reduced or waived upon written consent from landowner.

Recyc SystemsTM Inc.

(Biosolids Land Application)



Scale: 1" = 660 ft.

GRITE 1-2

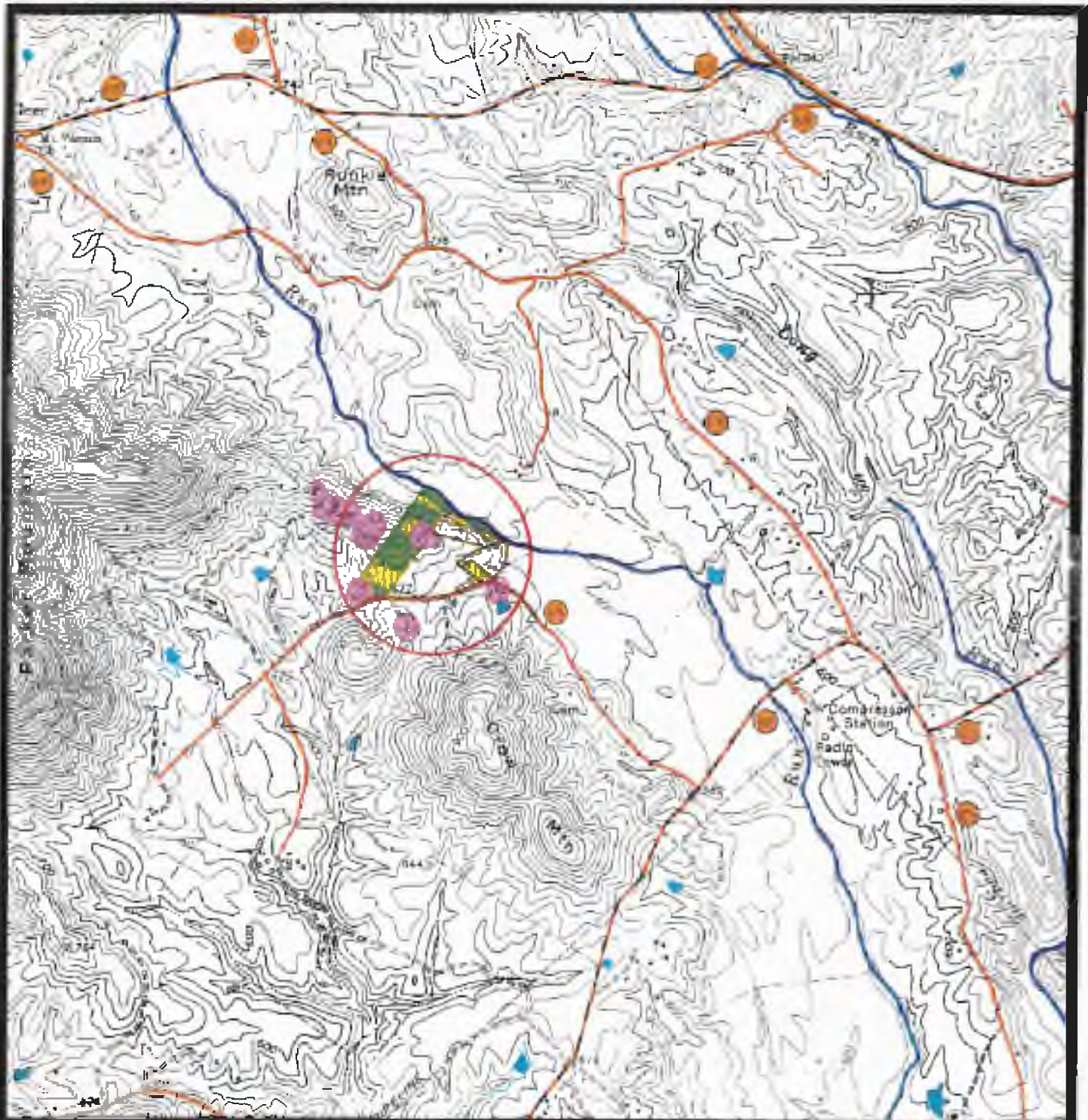
11-7-17

SITE PLAN



Recyc SystemsTM Inc.

(Biosolids Land Application)



Scale: 1" = 2000 ft.

GRHTE 1-2

11-7-17

TOPOGRAPHIC MAP

